NOMENCLATURAL NOTES

Rediscovery of the type series of the Carboniferous ichnospecies *Attenosaurus subulensis* (Aldrich in Aldrich & Jones, 1930) and *Cincosaurus cobbi* (Aldrich in Aldrich & Jones, 1930) with comments on the designation of neotypes

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Abstract. The purpose of this note, under Article 75.8 of the Code, is to set aside the neotype for the ichnospecies *Attenosaurus subulensis* Aldrich in Aldrich and Jones, 1930. It was believed that the type specimens for *Attenosaurus subulensis* were lost; however, a recent search through the collections at the Alabama Museum of Natural History in Tuscaloosa led to the rediscovery of one of the two syntypes. Furthermore, the rediscovery of the syntype of the ichnospecies *Cincosaurus cobbi* Aldrich in Aldrich and Jones, 1930 should also be recognized. The discovery of a portion of the *Attenosaurus subulensis* type series negates the previously erected neotype.

Keywords. Pennsylvanian; Alabama; Pottsville Formation; ichnospecies; trackways.

Attenosaurus subulensis Aldrich in Aldrich and Jones, 1930 (p. 13) and *Cincosaurus cobbi* Aldrich in Aldrich and Jones, 1930 (p. 27) are large tetrapod ichnospecies from the Early Pennsylvanian (Morrowan) of Alabama. Although no accession numbers were given to the syntypes of either species, the figured specimens for *A. subulensis* (Aldrich, 1930, pls. 2–4) and *C. cobbi* (Aldrich, 1930, pls. 6–7), housed at the Alabama Museum of Natural History (ALMNH) in Tuscaloosa, are recognized as the syntypes. These specimens were recovered from the Galloway Number 11 Mine, near Carbon Hill, Walker County, Alabama. The specimens were found above the Jagger Coal Seam within the Pottsville Formation, Lower Pennsylvanian, Morrowan (Aldrich & Jones, 1930; Metzger, 1965; Hunt et al., 2004; Haubold et al., 2005; Pashin, 2005). The purpose of this report is twofold: (1) to re-establish types for *Attenosaurus subulensis* and *Cincosaurus cobbi* based on the specimens figured in Aldrich (1930, Plates 2–4 and 6–7), and 2) to invalidate the designated neotype for *A. subulensis* (see Hunt et al., 2004; p. 40, Fig. 4A).

Syntypes for both ichnospecies were figured in the original 1930 description by Aldrich and were at the Alabama Museum of Natural History. In the subsequent 75 years, owing partially to the fragile nature of the shale in which the trackways are preserved, the syntypes were thought to be destroyed or lost.

In recent re-analyses of the ichnofauna of the Pottsville Formation, Alabama, various authors have noted that the types of *A. subulensis* and *C. cobbi* were lost (Hunt et al., 2004; Haubold et al., 2005). Both Hunt et al. (2004, p. 40, Fig. 4A) and Haubold et al. (2005, p. 93, 109) discussed the taxonomy of *Attenosaurus* and *Cincosaurus* in detail. Hunt et al. (2004, p. 40) recognized *Attenosaurus indistinctus* Aldrich, 1930 (ALMNH PV 1985.0001.0014) as a nomen dubium and *Cincosaurus jonesi* Aldrich, 1930 (ALMNH

PV1985.0001.0025) as a junior synonym of *A. subulensis*. Furthermore, Hunt et al. (2004, p. 40) designated another ALMNH specimen as the neotype of *A. subulensis*, an unaccessioned specimen on display at the ALMNH collected by Truman H. Aldrich and Walter B. Jones at the Holly Grove Mine, Walker County, Alabama in the late 1920s or early 1930s. This specimen is believed to be in the ALMNH but its whereabouts is currently unknown. Both Hunt et al. (2004) and Haubold et al. (2005) commented on the lost type, but neither designated a neotype for *C. cobbi*.

A recent inventory, made by the author, of types in the ALMNH collections led to the rediscovery of one of the two syntypes of *A. subulensis* and the syntype of *C. cobbi*. Although both syntypes are damaged, the remaining portions of both specimens are diagnostic enough to warrant retention of their type status. The identification of the syntypes was aided by examination and comparisons with the original photographs of the specimens published with the description of the new ichnospecies by Aldrich in Aldrich & Jones (1930) (Figs. 1 and 2). The type of *A. subulensis* (ALMNH PV1985.0001.0018) was found broken into a number of smaller pieces but is currently undergoing restoration (Fig. 1). The syntype of *C. cobbi* (ALMNH PV1985.0001.0027) has been broken and only a portion of the specimen remains (Fig. 2).

Since the syntypes of both ichnospecies have been recovered in the Alabama Museum of Natural History collections, following Article 75.8 of the International Code of Zoological Nomenclature the designated neotype should be set aside. Although the types were not given designated accession numbers by Aldrich in Aldrich & Jones (1930), two specimens referred to *Attenosaurus subulensis* and one specimen of *Cincosaurus cobbi* were figured and referred to as 'types'. For *A. subulensis*, ALMNH PV1985.0001.0018, was figured in

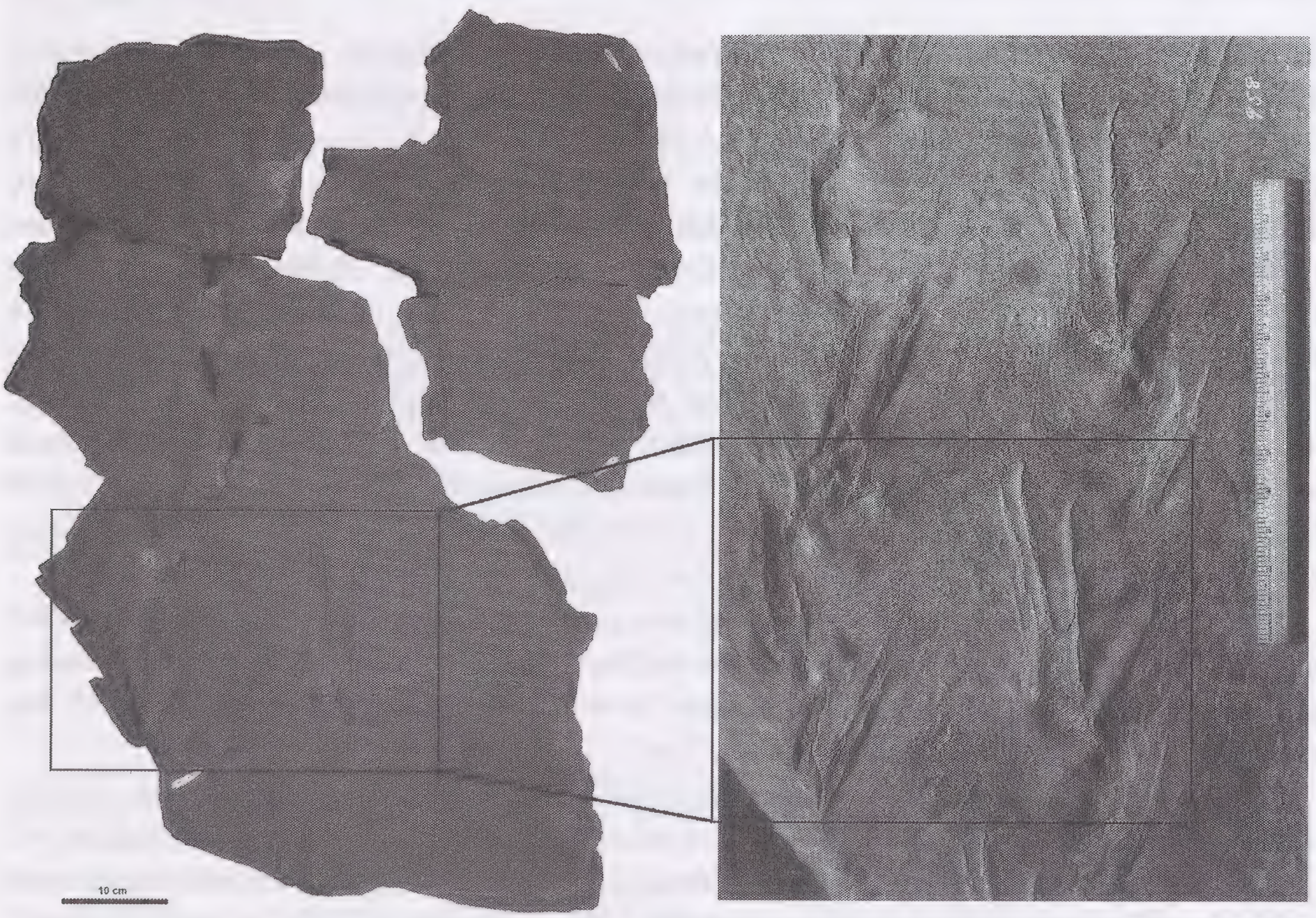

Fig. 1. The current state of the figured lectotype of *Attenosaurus subulensis* (ALMNH PV1985.0001.0018) (left) and the original picture (ALMNH 5A-958) of the same specimen figured (Plate 2; p. 17) in Aldrich & Jones (1930). The highlighted region on the lectotype corresponds to the same region in the photograph.

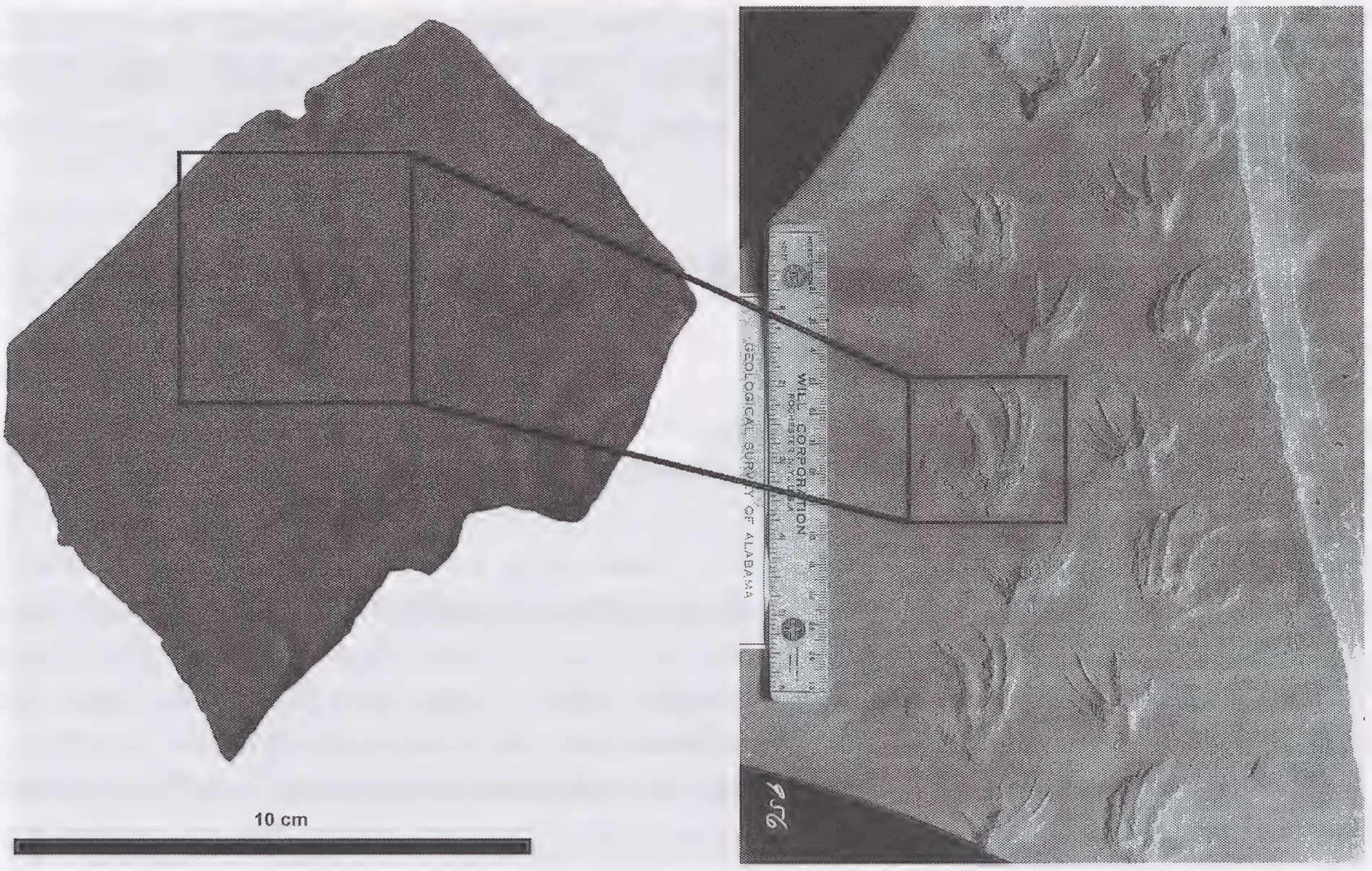

Fig. 2. The current state of the lectotype of *Cincosaurus cobbi* (ALMNH PV1985.0001.0027) (left) and the original picture (ALMNH 5A-956) of the same specimen figured (Plate 7; p. 31) in Aldrich & Jones (1930). The highlighted region on the lectotype corresponds to the same region in the photograph.

Aldrich (1930, pls. 2, 4). A second, unnumbered specimen was figured in Aldrich (1930, pl. 3). Thurmond & Jones (1981) referred to specimen ALMNH PV1985.0001.0018 as the holotype. Under Article 74.5 of the Code this constitutes a valid lectotype designation for the nominal species *Attenosaurus subulensis*. Unfortunately, the second figured syntype of *A. subulensis* is either lost or has been destroyed. Hereby specimen ALMNH PV1985.0001.0027 is designated as the lectotype of *C. cobbi*. It is the hope that this note will clarify type specimens of these iconic ichnospecies.

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